

## ABSTRACT

Method for controlling operation of an air conditioning system, including a starting operation step for operating the air conditioning system until a frequency of a compressor reaches to a preset target frequency, a system stabilizing step for stabilizing operation of the system after the frequency of the compressor reaches to the preset target frequency, and a regular operation step for operating the system at a fixed level. The system stabilizing step includes a first step for regulating opening of the expansion device, to increase the degree of superheat of refrigerant at an outlet of the compressor, comparing a temperature change rate of the condenser with respect to time to a preset temperature change rate, and a second step for, if the temperature change rate of the condenser with respect to time is lower than the preset temperature change rate, comparing the degree of superheat of refrigerant at an outlet of the compressor to a preset degree of superheat of refrigerant at an outlet of the compressor, and opening the opening of the expansion device to a preset state, if the degree of superheat of refrigerant at an outlet of the compressor is higher than the preset degree of superheat of refrigerant at an outlet of the compressor.